

CLAIMS

1. A barium titanate, which is single crystal in the form of particles, said particles comprising particles without a void having a diameter of 1 nm or more in an amount of 20% or more by number of the total particles.
2. The barium titanate according to claim 1, wherein said particles comprises particles without a void having a diameter of 1 nm or more in an amount of 50% or more by number of the total particles.
3. The barium titanate according to claim 1, wherein said particles comprises particles without a void having a diameter of 1 nm or more in an amount of 80% or more by number of the total particles.
4. The barium titanate according to any one of claims 1 to 3, wherein the particles have a BET specific surface area of 0.1 m<sup>2</sup>/g or more.
5. The barium titanate according to any one of claims 1 to 4, wherein no abrupt peak is detected at around 3500cm<sup>-1</sup> by infrared spectrum analysis of the particles after heat treatment thereof at 700°C.
6. The barium titanate according to any one of claims 1 to 5, comprising at least one element selected from the group consisting of Sn, Zr, Ca, Sr, Pb, Ho, Nd, Y, La, Ce, Mg, Bi, Ni, Al, Si, Zn, B, Nb, W, Mn, Fe, Cu, and Dy, said at least one element being in an amount of less than 5 mol% (0 mol% inclusive) on the basis of the entirety of BaTiO<sub>3</sub>.
7. The barium titanate according to any one of claims 1 to 6, which is in the form of powder.
8. The barium titanate according to any one of claims 1 to 7, which is synthesized by wet process.
9. A slurry comprising the barium titanate according to any one of claims 1 to 8.
10. A paste comprising the barium titanate according to any one of claims 1 to 8.
11. A dielectric material comprising barium

titanate according to any one of claims 1 to 8.

12. A dielectric ceramic comprising barium titanate according to any one of claims 1 to 8.

5 13. A piezoelectric material comprising barium titanate according to any one of claims 1 to 8.

14. A piezoelectric ceramic material comprising barium titanate according to any one of claims 1 to 8.

15. A dielectric film material comprising barium titanate according to any one of claims 1 to 8.

10 16. A capacitor comprising the dielectric material according to claim 11.

17. A capacitor comprising the piezoelectric material according to claim 13.

15 18. A capacitor comprising the dielectric film according to claim 15.

19. An integrated capacitor comprising the dielectric film according to claim 15.

20. A printed board comprising the dielectric film according to claim 15.

20 21. An electronic equipment comprising the capacitor according to any one of claims 16 to 19.